

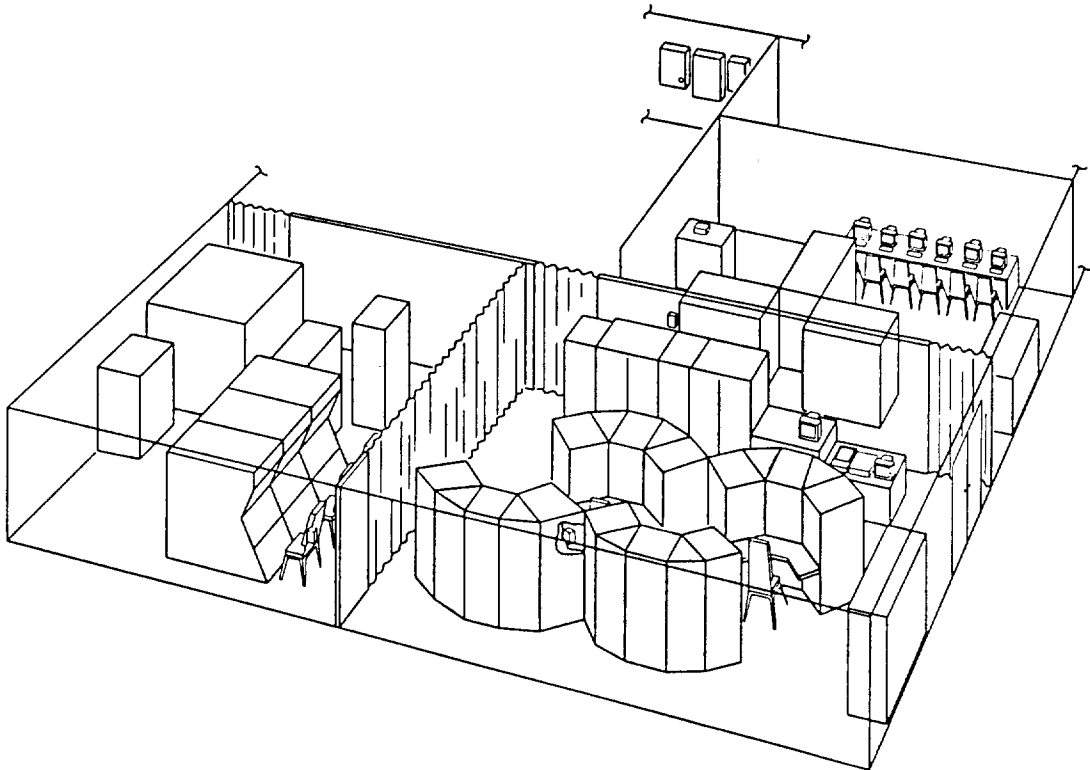
# SUMMARY OF E-2C AIRCRAFT TACTICS TRAINER

MARCH 1997

NAVAL AIR WARFARE CENTER TRAINING SYSTEMS DIVISION

DEVICE 15F8B

ORLANDO, FLORIDA



## TRAINING CATEGORY:

Radar (AEW/Navigation)

## ORIGINATING AGENCY:

CNO/AIR

## SECURITY CLASSIFICATION OF DEVICE:

Device 15F8B is classified Secret

## PURPOSE OF DEVICE:

To provide realistic training in the tactical use of the E-2C Weapons Systems.

## INTENDED USE:

Device 15F8B E-2C Tactics Trainer is used to train the Combat Information Center Officer (CICO), Air Control Officer (ACO), and the Radar Operator (RO) of the E-2C aircraft.

## FUNCTIONAL DESCRIPTION:

Device 15F8B simulates the aircraft CIC Compartment, associated equipment characteristics, and the external physical and electronic environment of the E-2C Airborne Tactical Data System (TADS). The Trainer consists of a Trainee area, Instructor Operator area, and simulation equipment area. Three (3) general purpose mini computers located in the simulation equipment area provide the main simulation software for the Trainer Device.

The Device configuration which is presented to the CIC crew during the training problem, is that of the actual aircraft. This operational equipment supplies to the CIC crew members, as a result of simulation, radar displays and controls, radio and result of simulation; radar displays and controls, radio and environmental sounds associated with communications, and Instructor controlled tactical scenarios representing a typical ATDS environment.

The Trainee area, which consists of the CIC Console, Computer Programmer (L-304), and the Forward Equipment Simulator Cabinet, provides familiarization, as well as advanced tactical training, for the E-2C aircrew with search radar, IFF and PDS detection system operation, navigation techniques, ICS,

voice communications and data link operation; Computer Programmer operation, Control Indicator Group operation for threat evaluation, weapon assignment and intercept control and In-Fight Performance Monitor (IFPM) System operation.

The Instructor Operator area, with its four (4) Instructor Stations, allows the operators to control all aspects of training, including scenario freeze, advance and real time modification. In addition, it provides direct supervision of the students and enables training on important operating procedures which cannot be normally practiced in the aircraft. Emergency procedures encountered by CIC aircrew are limited to the procedures necessary to compensate for decreased operational capability due to an operator inserted malfunction.

The simulation equipment consists of three (3) mini-computers (SIMCOM) and their peripheral devices, Radar/IFF Simulation System (RISS), Simulation Interface Cabinets, and Trainee Monitoring and Recording System (TMRS). The SIMCOM's drive the Trainer electronics with the necessary data for presenting the training scenario to the Trainee area CIC Compartment. The RISS provides radar and IFF simulation, including landmass, target and environmental videos, to the student displays. The Interface Cabinets provide the interface for the Audio/Comm, CIC, and Computer Programmer to the SIMCOM and Instructor Stations. The TMRS allows recording of the student displays along with the radio and ICS Audio. The SIMCOM's and their associated peripheral devices physically reside in the simulation equipment area. The remaining equipment described above, although part of the simulation equipment, physically reside in the Instructor Operator area.

#### PHYSICAL INFORMATION:

##### Trainee Area:

10' high x 19' deep x 25' wide

##### Instructor Operator Area:

10' high x 25' deep x 31' wide

##### Simulation Equipment Area:

10' high x 17' deep x 25' wide

#### EQUIPMENT REQUIRED (NOT SUPPLIED):

None

#### POWER REQUIREMENTS:

- 1) 120/208VAC, 60Hz, 3 Phase, 5 Wire (Wye), 30.3KVA
- 2) 115VAC, 400Hz, 3 Phase, 5 Wire (Wye), 4.5KVA

#### PUBLICATIONS FURNISHED:

1. Maintenance Instructions, E-2C Tactics Trainer, Device 15F8B, NAWCTSD P-5048(U), Vols. 1 thru 5.
2. Maintenance Requirements Cards, E-2C Tactics Trainer, Device 15F8B, NAWCTSD P-5049(U).
3. General Operations Handbook/Instructor Utilization Handbook, 15F8B, Series Tactics Trainer, NAWCTSD P-5238(U), Vols. I thru IV, and Slide/Script Programs I thru VIII.
4. Trainer Test Procedures and Results Report (TTPRR), E-2C Tactics Trainer, Device 15F8B, Vols. I thru XVIII, Report No. E-2CTT-E-R-95-212(U) (CDRL M00A).
5. Trainer Criteria Report, E-2C Tactics Trainer, Device 15F8B, Vols. I thru VII, Report No. E-2CTT-96-E-R-315(U) (CDRL M003).

#### PERSONNEL:

Instructors: One E-2C NFO qualified as an 15F8B Instructor, per trainee.

Operators: One Device 15F8B qualified Instructor per Station (total 4).

Maintenance: Staffed under Contractor Operations and Maintenance Support (COMS) contract.

Trainees: Three (3) per training session; (1) Combat Information Center Officer (CICO), (1) Air Combat Officer (ACO), and (1) Radar Operator (RO).

#### CONTRACT IDENTIFICATION:

Manufactured by Grumman Aerospace Corporation, Bethpage, New York, under NAWCTSD Contract No. N61339-91-C-0094.

Reproduction of this publication in whole or in part is permitted for any purpose of the United States Government.